



678286_1

SEQUENCE LISTING

<110> Riggins, Gregory
Lal, Anita
Loging, William

<120> FOUR GENETIC TUMOR MARKERS SPECIFIC FOR
HUMAN GLIOBLASTOMA

<130> 00250.00003

<140> 09/853,880

<141> 2001-05-14

<160> 17

<170> FastSEQ for windows Version 4.0

<210> 1

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 1

cgtcttcccc tccatcg

17

<210> 2

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 2

ctcgттаатg tcacgcac

18

<210> 3

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> PCR primer

<400> 3

ttactttaat ttagaaatag

20

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 4

atcaggtaat gcagtttggt

20

<210> 5
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 5
 ctgcctagac ggtgtgaag 19

<210> 6
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 6
 agtggctggc tctgagtcac 20

<210> 7
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 7
 catcgacctg gagactgaca ac 22

<210> 8
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 8
 ccattctgcg gacatatttg 20

<210> 9
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 9
 agccagcaag atccgagtg 19

<210> 10
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 10 gcacaatcta agccacgctg	20
<210> 11 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> PCR primer	
<400> 11 gcaggcctgg tttattgaaa	20
<210> 12 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> PCR primer	
<400> 12 ggttgcttca tccacacctt	20
<210> 13 <211> 19 <212> DNA <213> Artificial Sequence	
<220> <223> PCR primer	
<400> 13 aggtcacagg tctcgaaaa	19
<210> 14 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> PCR primer	
<400> 14 agaggtggtg gaagaaactg	20
<210> 15 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> PCR primer	
<400> 15 aactctaccc agtgtggaag	20
<210> 16 <211> 20 <212> DNA <213> Artificial Sequence	

<220>
 <223> PCR primer

<400> 16
 ttgaggaagt ggctaggatc

20

<210> 17
 <211> 560
 <212> PRT
 <213> Homo sapiens

<400> 17
 Met Glu Cys Leu Tyr Tyr Phe Leu Gly Phe Leu Leu Leu Ala Ala Arg
 1 5 10 15
 Leu Pro Leu Asp Ala Ala Lys Arg Phe His Asp Val Leu Gly Asn Glu
 20 25 30
 Arg Pro Ser Ala Tyr Met Arg Glu His Asn Gln Leu Asn Gly Trp Ser
 35 40 45
 Ser Asp Glu Asn Asp Trp Asn Glu Lys Leu Tyr Pro Val Trp Lys Arg
 50 55 60
 Gly Asp Met Arg Trp Lys Asn Ser Trp Lys Gly Arg Val Gln Ala
 65 70 75 80
 Val Leu Thr Ser Asp Ser Pro Ala Leu Val Gly Ser Asn Ile Thr Phe
 85 90 95
 Ala Val Asn Leu Ile Phe Pro Arg Cys Gln Lys Glu Asp Ala Asn Gly
 100 105 110
 Asn Ile Val Tyr Glu Lys Asn Cys Arg Asn Glu Ala Gly Leu Ser Ala
 115 120 125
 Asp Pro Tyr Val Tyr Asn Trp Thr Ala Trp Ser Glu Asp Ser Asp Gly
 130 135 140
 Glu Asn Gly Thr Gly Gln Ser His His Asn Val Phe Pro Asp Gly Lys
 145 150 155 160
 Pro Phe Pro His His Pro Gly Trp Arg Arg Trp Asn Phe Ile Tyr Val
 165 170 175
 Phe His Thr Leu Gly Gln Tyr Phe Gln Lys Leu Gly Arg Cys Ser Val
 180 185 190
 Arg Val Ser Val Asn Thr Ala Asn Val Thr Leu Gly Pro Gln Leu Met
 195 200 205
 Glu Val Thr Val Tyr Arg Arg His Gly Arg Ala Tyr Val Pro Ile Ala
 210 215 220
 Gln Val Lys Asp Val Tyr Val Val Thr Asp Gln Ile Pro Val Phe Val
 225 230 235 240
 Thr Met Phe Gln Lys Asn Asp Arg Asn Ser Ser Asp Glu Thr Phe Leu
 245 250 255
 Lys Asp Leu Pro Ile Met Phe Asp Val Leu Ile His Asp Pro Ser His
 260 265 270
 Phe Leu Asn Tyr Ser Thr Ile Asn Tyr Lys Trp Ser Phe Gly Asp Asn
 275 280 285
 Thr Gly Leu Phe Val Ser Thr Asn His Thr Val Asn His Thr Tyr Val
 290 295 300
 Leu Asn Gly Thr Phe Ser Leu Asn Leu Thr Val Lys Ala Ala Ala Pro
 305 310 315 320
 Gly Pro Cys Pro Pro Pro Pro Pro Pro Pro Arg Pro Ser Lys Pro Thr
 325 330 335
 Pro Ser Leu Gly Pro Ala Gly Asp Asn Pro Leu Glu Leu Ser Arg Ile
 340 345 350
 Pro Asp Glu Asn Cys Gln Ile Asn Arg Tyr Gly His Phe Gln Ala Thr
 355 360 365
 Ile Thr Ile Val Glu Gly Ile Leu Glu Val Asn Ile Ile Gln Met Thr
 370 375 380
 Asp Val Leu Met Pro Val Pro Trp Pro Glu Ser Ser Leu Ile Asp Phe
 385 390 395 400
 Val Val Thr Cys Gln Gly Ser Ile Pro Thr Glu Val Cys Thr Ile Ile

678286_1

				405					410				415				
Ser	Asp	Pro	Thr	Cys	Glu	Ile	Thr	Gln	Asn	Thr	Val	Cys	Ser	Pro	Val		
			420					425					430				
Asp	Val	Asp	Glu	Met	Cys	Leu	Leu	Thr	Val	Arg	Arg	Thr	Phe	Asn	Gly		
		435					440					445					
Ser	Gly	Thr	Tyr	Cys	Val	Asn	Leu	Thr	Leu	Gly	Asp	Asp	Thr	Ser	Leu		
	450					455					460						
Ala	Leu	Thr	Ser	Thr	Leu	Ile	Ser	Val	Pro	Asp	Arg	Asp	Pro	Ala	Ser		
465					470					475					480		
Pro	Leu	Arg	Met	Ala	Asn	Ser	Ala	Leu	Ile	Ser	Val	Gly	Cys	Leu	Ala		
				485				490						495			
Ile	Phe	Val	Thr	Val	Ile	Ser	Leu	Leu	Val	Tyr	Lys	Lys	His	Lys	Glu		
			500					505					510				
Tyr	Asn	Pro	Ile	Glu	Asn	Ser	Pro	Gly	Asn	Val	Val	Arg	Ser	Lys	Gly		
		515					520					525					
Leu	Ser	Val	Phe	Leu	Asn	Arg	Ala	Lys	Ala	Val	Phe	Phe	Pro	Gly	Asn		
	530					535					540						
Gln	Glu	Lys	Asp	Pro	Leu	Leu	Lys	Asn	Gln	Glu	Phe	Lys	Gly	Val	Ser		
545					550					555					560		